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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,371	02/14/2006	Erwin Meinders	NL030994US1	9266
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EXAMINER				
GOOD JOHNSON, MOTTLEWA				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/568,371

Applicant(s)

MEINDERS, ERWIN

Examiner

M GOOD JOHNSON

Art Unit

2628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2009.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 19-22 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-16, 19-22 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 9-14, 16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baudisch, U.S. Patent Publication 2002/0167531 in view of Taniguchi et al., U.S. Patent Number 6,445,365 B1.

Regarding claim 1, Baudisch discloses a visual content signal display apparatus comprising: means for receiving a visual content signal (col. 6, lines 15-18, graphical data communication channels 205 and user input channels 245 allow data to be transferred between the imaging system and display units, which Examiner interprets as means for receiving visual content); means for presenting the visual content signal on a primary display, (240, image processor); means for extracting content information from the visual content signal (280, image fork); means for generating an image in response to the content information (255, image processors); and means for displaying the image on a secondary display area thereby providing a combined display having an increased viewing angle (110, larger display).

However, it is noted that Baudisch fails to disclose background content information from the visual content signal and generating a surround image in response to the background content information.

Taniguchi discloses displaying an enlarged image of a first and second image and further discloses extracting from a video signal a foreground image and a background image to be displayed on a foreground screen and a background screen, col. 13, lines 1-41.

It would have been obvious to one of ordinary skill in the art at the time of the invention to include in the multiple display system as disclosed by Baudisch, the video signal image extracting a foreground and background image to be displayed on the multiple display screens as disclosed by Taniguchi, to display depth in a display and wide angle viewing without restrictions.

Regarding claim 2, Baudisch discloses the means for displaying the image is operable to project the image on to an external surface of an object (figure 16).

Regarding claim 3, Baudisch discloses the external surface is an internal surface of a room (col. 17, lines 29-30).

Regarding claim 4, Baudisch discloses the means for extracting is operable to extract real time information from the visual content signal, and the means for

generating the image is operable to generate a real time image in response to the real time information (paragraph 0025).

Regarding claim 5, Taniguchi discloses the means for extracting is operable to extract the background content information in response to background meta-data comprised in the visual content signal (col. 11, lines 4-7, background image generated on the basis of data necessary for image information generation)

Regarding claim 6, Taniguchi discloses the means for extracting is operable to extract the background content information in response to a content analysis of the visual content signal (figures 13A-13C).

Regarding claim 9, Taniguchi discloses a visual characteristic of an image section of the visual content signal proximal to an edge of the primary display; the means for generating the surround image is operable to generate at least a partial surround image having a corresponding visual characteristic; and the means for displaying the surround image is operable to display the partial surround image proximal to the edge (figure col. 12, lines 8-35).

Regarding claim 10, Taniguchi discloses the means for generating a surround image is operable to generate the surround image in response to a predetermined image associated with the background content information (col. 13, lines 42-57, the

portion of the image not detected as the foreground image is generated with a black background signal).

Regarding claim 11, Taniguchi discloses the means for generating the surround image is operable to generate the surround image in response to a predetermined default image if no valid background content information is determined (col. 13, lines 55-57).

Regarding claim 12, Baudisch discloses the means (109) for generating the image is operable to generate an image at a lower quality than a quality of the display of the content signal on the primary display (col. 5, lines 49-50).

Regarding claim 13, Taniguchi discloses the means for generating the surround image is operable to generate the surround image with a quality that decreases for increasing distance from the primary display (col. 7, lines 25-59).

Regarding claim 14, Baudisch discloses the means for generating the image is operable to generate the image in response to characteristics of a viewing environment associated with the secondary display area (calibration of display units, paragraphs 0065-0070).

Regarding claims 16 and 19, they are rejected based upon similar rational as above claim 1.

Regarding claims 20-22, Baudisch discloses storing a plurality of images (buffers 295), and generating a surround image from a selected one (two) of the images. Baudisch discloses image processor, 240, processes the image to the image fork, in which the image is forked to buffers 295, and selected by the viewers 1-n, for processing by image processor 1-n, for display on display units 1-n. Baudisch further discloses a primary image surrounded by a secondary display image (figures 11, 15 - 19)

However, it is noted that Baudisch fails to disclose corresponding to a plurality of background content characteristics, and wherein generating a surround image in response to the background content information includes selecting one of the stored images in response to the extracted background content information.

Taniguchi discloses in col. 12, line 50- col. 14, line 17, division of an image information, for example figure 13A, into a gazing point portions, (figure 13A a, b and c) and a background portion, having foreground images, see figure 13B and background image, figure 13C, and further allotting the gazing point portion and the background portion is possible, therefore making it inherent that persons a and b may be allotted as a portion of the background image, to create more than one background image.

It would have been obvious to one of ordinary skill in the art at the time of the invention to include in the mixed image display as disclosed by Baudisch, separation of

a background portion as disclosed by Taniguchi, to display the foreground image in a higher resolution than the background image for a more detail view of the foreground image.

3. Claims 7, 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baudisch in view of Taniguchi as applied to claim 1 above, and further in view of Witehira.

Regarding claim 7, however it is noted that both Baudisch and Taniguchi fail to disclose content analysis comprising image object recognition.

Witehira discloses the content analysis comprises image object recognition (col. 6, lines 1-4, extracting the car and mountain).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include in the increase display as disclosed by Baudisch, the background and foreground image extraction as disclosed by Taniguchi to provide an increased display for a wide viewing of an image. It further would have been obvious to include the object recognition as disclosed by Witehira to provide specific important focus objects in the increased display area for a user to gaze upon.

Regarding claim 8, Witehira discloses the means for generating a surround image is operable to perform motion estimation of an image object and to generate the surround image in response to the motion estimation (col. 5, lines 55-63).

Regarding claim 15, Witehira discloses means for determining a category of the visual content signal and wherein the means for generating the surround image is operable to generate the surround image processing in response to the category (video image signal is converted to represent pixel properties such as pixel color, pixel location and pixel motion).

Response to Arguments

4. Applicant's arguments filed 04/07/09 have been fully considered but they are not persuasive.
5. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Baudisch discloses mixed resolution in which the display have different pixel sizes on the display unit, abstract, and Taniguchi discloses in col. 7, lines 42-61, a LCD with a small pixel size and a larger display area, which Examiner interprets as a form of a mixed resolution display, therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include in the mixed resolution display as disclosed by

Baudisch, the variation of the signal of the images as disclosed by Taniguchi, to improve the continuity of mixed resolution displayed images.

Applicant argues that element 280 in Baudisch is an image fork, the image fork 280 replicates the image and provides the multiple images to separate viewers 260 which scale and crop the image to provide the appropriate data for viewing a corresponding portion of the total image on a corresponding display 290. Image processor 255 receives data from a corresponding view and processes the data so that it can drive the corresponding display 290, image fork 280 does not extract any content information from the image, and image processor 255 does not generate an image from any extracted content information. Baudisch discloses the image fork 280, comprises an image replicator 250, the image replicator 250 receives the image data and uses it to generate multiple images, therefore Baudisch discloses receiving a single image and generating multiple images from the single image, in figure 1, and further receiving image information and performing the necessary transformation on the input, paragraph 0058. Baudisch fails to disclose the image transformation as being background content information specifically, which Taniguchi discloses. Taniguchi discloses in col. 12, line 50- col. 13, line 41, division of an image information into a gazing point portion and a background portion. Therefore the making it obvious to perform in the mixed display as disclosed by Baudisch, the image division as disclosed by Baudisch of a background portion as disclosed by Taniguchi to display the foreground image in a higher resolution than the background image. Baudisch discloses in figure 1, of the imaging system, display unit 1, being a monitor, and display unit n, as a projector. It is therefore inherent

that Baudisch generates a surround image, having one of the images displayed on a monitor and the other image being displayed by a projector, such as in figures 11 and 15-19.

6. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicant argues that Baudisch, and lines 29-30 of that column 9, fails to disclose where the image is displayed on the surface of any room. The cited section of Baudisch discloses a mixed resolution display, using a projector for the larger display areas and further discloses that the arrangement would allow for a wider range of materials for projection surface, such as walls, in paragraph 0106.

Applicant argues claims 5 and 6, in which background data is meta-data and the extracted background content information is in response to content analysis. Tanguichi discloses in figure 13A, analysis of the entire image, and extraction in figure 13B, leaving the background portion in figure 13C. Tanguichi further discloses col. 11, lines 4-7, background image generated on the basis of data necessary for image information

generation, therefore it is inherent to include meta-data, in that meta-data is a form of data, if it is necessary for image generation.

Applicant argues the system of claim 19 includes an extraction processor for extracting background content information from a visual content signal; and a second display processor for generating a surround image in response to the extracted background content information, wherein a combination of the image and the surround image provide a greater viewing angle than the image alone. Baudisch discloses image processor 240, which processes the image, and image processors 1-n, in figure 1, for the display units 1-n, therefore Baudisch discloses a primary display processor (255), an image processor 240, and a second display processor (255). It is noted that the processor as disclosed in figure 1, is not specifically designated an "extraction" processor for extracting background information. Tanguichi discloses extracting a background image, col. 13, lines 1-41. It would have been obvious to one of ordinary skill in the art for the reasons as recited in claim 1, to implement the image processor 240, to perform the extracting of the background image as disclosed by Tanguichi, for enhanced viewing on a mixed display with a wide angle.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M GOOD JOHNSON whose telephone number is (571)272-7658. The examiner can normally be reached on Monday-Friday 8-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2628

/Motilewa Good-Johnson/
Primary Examiner, Art Unit 2628